Abstract Of The Invention

A spacecraft emulation system for emulating the operation of a spacecraft and the operation of a plurality of ground stations is coupled to spacecraft status and control clients that request connections to one of the plurality of simulated ground station ranging and tracking servers. The connection requests are made to a common address with a port address that is unique to a specific ground station. Separate range servers and tracking servers are instantiated for each ground station and return data specific to the ground station. The spacecraft emulation system determines ranging and tracking data for the plurality of simulated ground stations but supplies said data on a ground station by ground station basis. The status and control system transparently determines which ground station is simulated.